# U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Silvertip Pipeline Spill



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, Region VIII

**Subject: SITREP** # 08 **July 25, 2011** 

**Silvertip Pipeline Oil Spill Response** 

Billings, Montana Latitude: 45° 39' 25.57" Longitude: 108° 44'54.35"



**Reporting Period:** 0700 hours 07/23/11 to 0700 hours 07/26/11 (72 hour Op Period)

USEPA	Finance Section	Deputy I/C	Operations
Concurrence			

#### Introduction

At approximately 11:00 PM on Friday, July 1 a break occurred in a 12-inch pipeline owned by ExxonMobil that resulted in a spill of crude oil into the Yellowstone River approximately 20 miles upstream of Billings, Montana. According to the company's estimates, 1,000 barrels of oil entered the river, which was in flood stage, before the pipeline was cut off. EPA's primary concern is protecting people's health and the environment. EPA will remain on-site to ensure cleanup and restoration efforts do just that. EPA continues to hold ExxonMobil, the responsible party, accountable for assessment and cleanup.

#### 1.1 Background Information

D.O. Number: Action Memo Date:

Response Authority:OPAResponse Type:EmergencyResponse Lead:PRPIncident Category:Removal Action

NPL Status: Non NPL Operable Unit:

**Mobilization Date:** 7/2/11 **Start Date:** 7/2/11

**RCRIS ID:** 

ERNS No.: State Notification: FPN#: E11809 Reimbursable Account

#### 1.2Preliminary Site Inspection and Response Activities

An EPA On-Scene Coordinator (OSC) has been directing and overseeing cleanup activities since arriving at the site. EPA and U.S. Fish and Wildlife Service personnel conducted aerial assessments and reported seeing bank deposits and small pooling of oil in backwaters and slow water at intermittent points along both the north and south banks of the Yellowstone River. Personnel are walking the shores and are deploying absorbent booms along the river banks to absorb oil that collected in slow water along the shoreline. Shoreline assessment is ongoing to determine effective strategies for recovering the oil. Sorbent boom deployment is ongoing and where possible other oil recovery and containment approaches are being implemented.

#### **Incident Objective**

The following incident objectives and command emphasis are taken from the IAP for the Operational Period 12. For July 23, 2011, at 0730 to July 26, 2011, at 0730.

#### General Response Objectives

- 1. Ensure the safety of the responders.
- 2. Maintain the source of the spill.
- 3. Characterize and assess the impact to maximize the protection of public health and welfare.
- 4. Define impacted areas.
- 5. Contain and recover spilled material.
- 6. Develop and execute a remediation work plan for impacted areas.
- 7. Manage a coordinated response effort.
- 8. Execute Wildlife Plan to recover and rehabilitate injured wildlife.
- 9. Keep stakeholders and public informed of response activities (Residential, Commercial, Agricultural, and Tribal). Increase general media availability and access to field and command operations within safety and property constraints.

#### 2.0 Background

On July 6, 2011 EPA issued an administrative order to ExxonMobile instructing the oil company to provide information on the circumstance of the spill, conduct appropriate recovery and remediation actions, and perform ongoing environmental sampling. The order required ExxonMobile to provide a Workplan under Paragraph VI. ExxonMobil submitted the required Workplan documents or revisions to those documents on July 19, 2011. Those documents are now being reviewed by EPA, the State of Montana, and other agency partners.

#### 3.0 Current Operations

Exxon has approximately 1839 personnel working the spill. 20% of the responders are from Montana. There are 19 persons from EPA, 6 from the USCG Strike Team and 3 START contractors.

<u>Division A</u>: Personnel were deployed from the Riverside Park and the Duck Creek staging areas. On shore operations continued along the river bank and the shallow backwaters behind the islands. Air boats are no longer in use due to the receding Yellowstone River levels because boat landing at the islands is no longer safe due to the receding water levels. Cleanup work continues on the interior of one oiled residence in Division A. A new island has emerged due to receding river levels, crews will continue to assess flood plains as they emerge. In Divisions A&B, for island response, air lift operations will bring shedders and debris removal equipment and crews will work on the ground shoreline.

<u>Division B</u> personnel were deployed from the Billings Flying Club and the Duck Creek staging areas. On shore operations continued along the river bank. SCAT surveys continued to be performed in Division B. No SCAT actions had been started in Division C. Daily helicopter over-flights were conducted to view river operations as well as to look for oiled and/or nesting wildlife.

EPA ERT continues to act as liaison between SCAT and Operations to help insure that cleanup recommendations were followed in the field. ERT observed cleanup operations while working on a joint EPA/Exxon team to resolve issues with extent of cleanup of oiled vegetation and woody debris piles, primarily in Division A and B. ERT continues participation on the Technical Advisory Group in the ICP to assist with determination of possible oil cleanup/treatment methods.

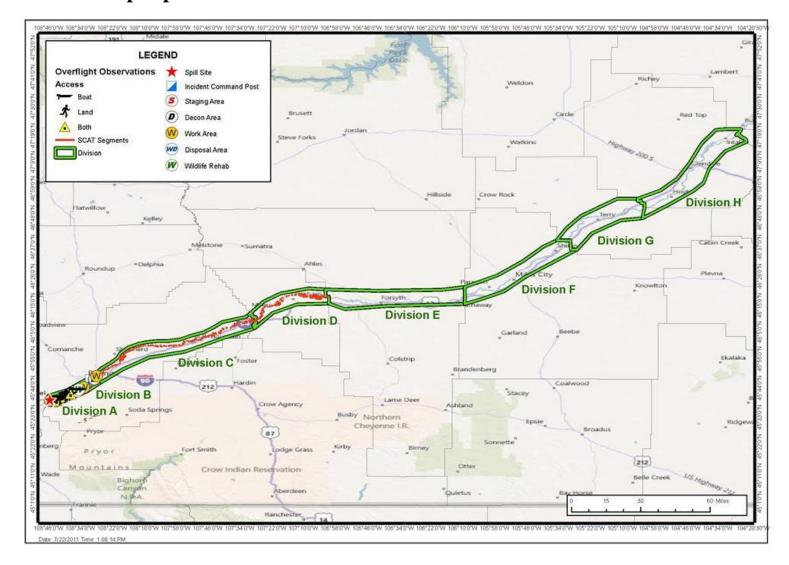
Island clean-up continues to be top priority as access is becoming limited because of the receding river levels.

Three USCG Strike team personnel were deployed as field observers in Division A & B to monitor the cleanup effort.

The wildlife rehab was maintained for the rescue of oiled birds. An oiled Cooper's hawk and a warbler were cleaned and released. Bird nesting areas were identified and exclusion zones were established until such time as the birds have fledged.

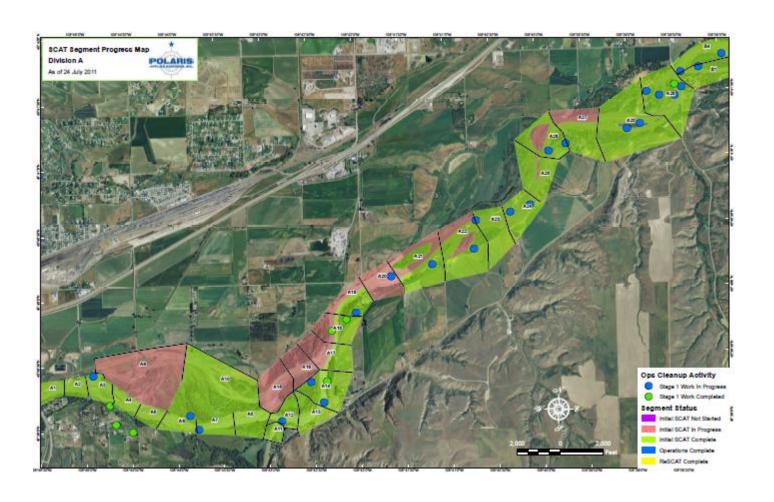
EPA continues to interact with concerned citizens. During this operational period the Unified Command authorized the use of mechanized equipment and the use of helicopter sling load applications.

### 7-21 Silvertip Pipeline Incident Work Areas Overview

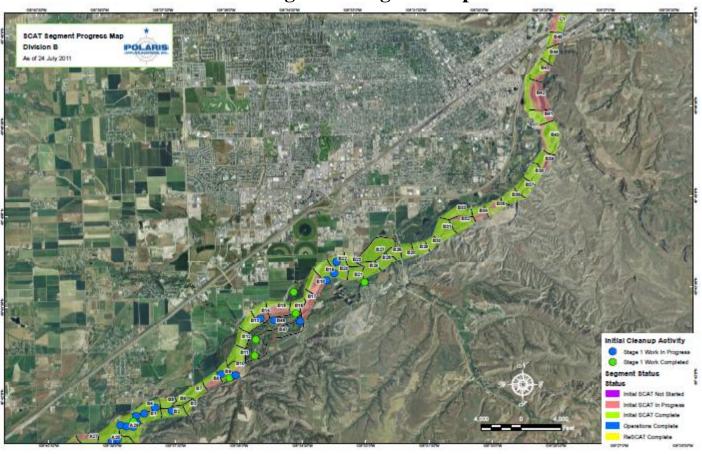


<sup>\*</sup>Maps are being updated at this time.

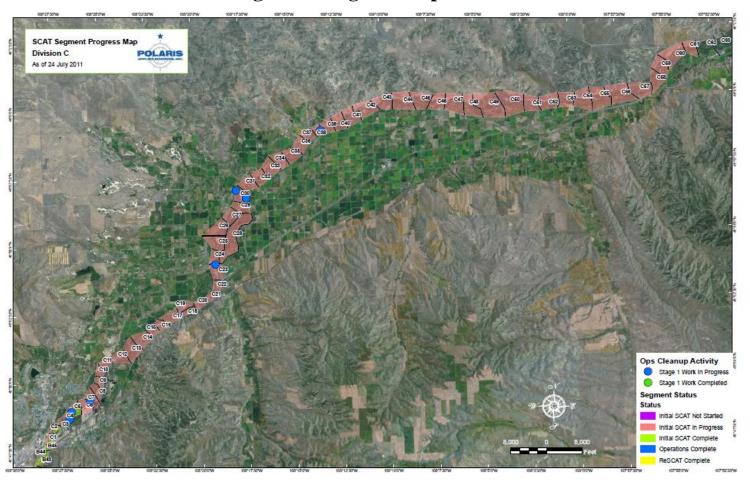
## 7.24.2011 Division A – SCAT Segment Progress Map



## 7.24.2011 Division B – SCAT Segment Progress Map

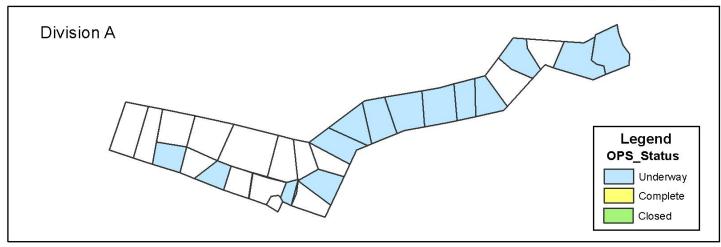


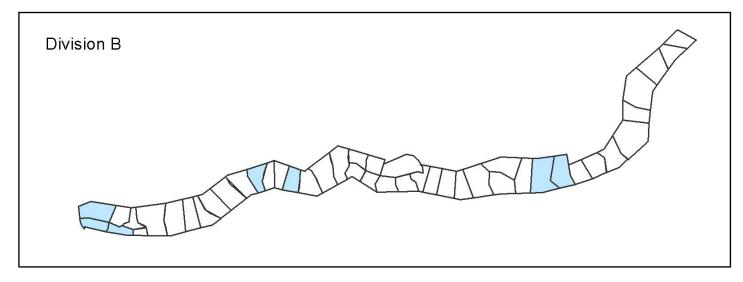
## 7.24.2011 Div. C - SCAT Segment Progress Map

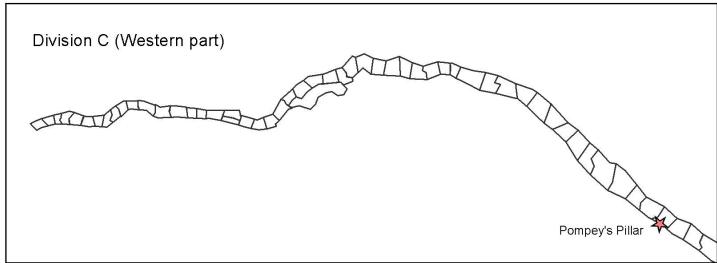


# Silvertip Incident OPS Work Status 7/21/2011

\*Data is current as of 7/20/2011







**SCAT Monitoring Data (7-23)** 

Work Area by Division	Number of Segments	Number of Surveys in Progress <sup>2</sup>	es) <sup>1</sup> Moderate	Heavy				
		Divis	ion A		•			
7/23	137	8	16.42	3.39	6.43	12.81	1.14	
		Divis	ion B					
		Divis	ion C					
7/23	144	0	1.99	1.91	0	0.19	0	
Division D								
7/23	47	0	0	0	0	0	0	

<sup>&</sup>lt;sup>1</sup>Represents miles of impacted areas observed during completed SCATS
<sup>2</sup>Segments evaluated include only partial shorelines in each segment pending boat access due to unsafe river conditions

Division	Acres
A	498.59
В	613.31
С	90.68
Total	1,202.58

7-24 SCAT Areas Surveyed

### Operations Work Area/Work Site Summary (7/24)

Stage 1 Clean-Un Progress

Work Area by Division	Total Sites	Underway (7/24)	Operationally Complete (7/24)			
A	11/NC <sup>1</sup> /NC <sup>1</sup>	4/NC <sup>1</sup> /NC <sup>1</sup>	7/NC <sup>1/</sup> NC <sup>1</sup>			
В	15/NC <sup>1</sup> /NC <sup>1</sup>	9/8/NC <sup>1</sup>	6/7/NC <sup>1</sup>			

**START and CTEH Samples** 

				****																				
			07/0		07/1	ate: 0/11 - 3/2011		ate: 14/11		ate: 15/11		ate : 16/11		ate:		ate: 18/11		ate:		ate: 20/11		ate: 21/11	COLLEG	TAL CTED TO TE:
LATEST			07/0			3/2011	07/1	14/11	077.	15/11	07/1	10/11	07/1	1//11	07/1	10/11	07/1	19/11	07/2	20/11	07/2	1/11	DA	IE;
UPDATE:				Exxo																				
07/22/11 PM				n																				
				Mobi		Exxon		Exxon		Exxon		Exxon		Exxon		Exxon		Exxon		Exxon		Exxon		Exxon
			EPA	1	EPA	Mobil	EPA	Mobil	EPA	Mobil	EPA	Mobil	EPA	Mobil	EPA	Mobil	EPA	Mobil	EPA	Mobil	EPA	Mobil	EPA	Mobil
		Surface	5	5	2	5		2		1						3		1		2			7	19
Water	XX7. 11	Drinking	4	35	14	17	2	2	2	5					1	6		2		3			23	70
	Well	Irrigation	1	11	1	12		8		1								1					2	33
	Soil				41		10		7		12												70	0
Se	dimen	nt			15		5		7		3												30	0
	Air		6	50		73		18		9		9		9		10		10		10		2	6	200
P	roduct	t	3		1																		4	0
,	Wipe																					10	0	10
,	Total		19	101	74	107	17	30	16	16	15	9	0	9	1	19	0	14	0	15	0	12	142	332
EPA %	Confir	mation	1	9		69	5	57	1	00	1	67				5		0		0		0	4	3

No changes to 7-25 Soil and Sediment Sampling Locations Divisions A, B, C, D maps. Soil and sediment sampling will resume after 8.2.2011.

#### 4.0 Environmental Unit Activities

Period (7/22-7/25)

• EMPCo. investigated an anomaly in Section G. This anomaly was identified by NOAA in review of over flight photos on July 3, two days after the spill. A ground crew from EMPCo., accompanied by MDEQ, assessed the area by ground and confirmed that the anomaly is not oil.

#### Tribal Coordination

- Eight members of the Crow Nation attended 24 hour HAZWOPER training in accordance with 29 CFR 1910.120e(3)(iii). The training was offered by Clean Harbors. EPA OSC Wagner assisted by providing site-specific health and safety information. Crow Nation will have representatives for SCAT as well as coordinating with Operations on activities in culturally-sensitive areas
- OSCs M. Zimmerman and C. Wagner prepared a draft PRFA for the Tribal Liaison, who will meet with EPA on 7/26/11 to review the agreement. EPA hopes to attain a signature of agreement at that time.
- The Crow Tribe will be providing cultural awareness training for all command post personnel on 7/26 or 7/27.

#### Technical Advisory Group

- The following proposed consolidated cleanup technologies ("CTR") were reviewed in the TAG meeting and approved under appropriate conditions. The CTR plans were developed and passed to Unified Command
  - No further action
- On 7/22/11, EMPCo. provided a petroleum scientist to give a presentation on fate of weathered oil.
   Agricultural Issues
- EMPCo. performed a fixative bench test on 7/24/11 to determine if any natural fixatives will "stick" to the oil to prevent accidental contact with wildlife. Three media were tested: kitty litter, sand, and dried sediments.

#### Agricultural Fact Sheet

 The EU drafted a Fact Sheet regarding agricultural lands. The target audience is for citizens who have large areas of agricultural lands which may be contaminated. The final draft was prepared and submitted to USDA, Yellowstone County Extension, and MDEQ for subject matter expert review. EPA received comments from USDA on 7/25/11

- The Yellowstone County Extension Agent forwarded the draft to a professor at Montana State University Extension. This subject matter expert provided comments that were inconsistent with previously received comments.
- The TAG established a subcommittee to address a wide variety of information being provided on crops and livestock. The group met for the first time on 7/25/10. The top priority topics are
  - Whether to plant or not plant this year on contaminated areas
  - Toxicity on livestock
  - Possible assessment team for individual cases
- o EMPCo. implemented its surface water sampling plan. START is accompanying the team to collect background samples for data analysis. This will complete surface water sampling unless an unusual event occurs.
- EPA continues to coordinate with Montana agencies daily including, but not limited to MDEQ, Montana Fish, Wildlife & Parks, and Montana DCNR, the Crow Tribal Nation, and the Governor's appointee for tribal issues.

#### **5.0Additional Operations**

IBR continued to monitor the oiled bald eagle, they have determined that the female will not require cleaning, but they are still attempting to make that determination with the male.

Animals collected dead: 1 wood duck, 2 ducklings (most likely mallards), 2 fish (mountain white fish, white sucker), 1 fox, 1 beaver, 1 Lazuli Bunting and 2 Great Horned owls. Animals washed: 2 toads (western toad, woodhouse's toad), 1 garter snake, 1 yellow warbler, 1 Cooper's Hawk, 1 Canada goose. Animals in care: Juvenile robin. Animals released: 2 toads (western toad, woodhouse's toad), 1 garter snake, 1 yellow warbler, 1 Cooper's Hawk, 1 Canada goose.

Animals Observed oiled: 5 Canada geese, 3 mallards, 6 common mergansers, 1 white pelican, 1 great blue heron, 1 American robin, 1 yellow warbler, 3 bald eagles, 1 red tailed hawk, 1 pheasant, 1 unknown raptor, 1 white tailed deer, 1 western toad, 1 woodhouse's toad, 1 garter snake.

#### **6.0 Response Metrics**

All progress metrics in this are as reported by ExxonMobil unless otherwise indicated.

**Boom/Sorbent Report (7-23, 7-24, 7-25 data)** 

	Staged	Assigned
Boom Available (ft)	41,180/41,524/41,180	41,466/42,256/42,816
Sorbent Rolls	17,568/13,680/13,680	9,120/9,216/12,816
Sorbent Pads	2,053/2,120/2,115	/NC <sup>1</sup> //2,499/2,504
Boom	100/NC <sup>1</sup> /NC <sup>1</sup>	600/NC <sup>1</sup> /NC <sup>1</sup>
Viscous Sweep	3,879/10,371/10,401	6,195/NC <sup>1</sup> /6,270

<sup>&</sup>lt;sup>1</sup>No Change

Estimated Soil and Debris Waste Tracking (7-21 data)\*

Waste Stream	Recovered	Disposed	Stored			
Oily Liquids (bbls)		0	162			
Oily Solids (yd³)	1972	1292	680			

#### 7.0 Situation Unit: Activities for Next Reporting Period

The next reporting period (SITREP #8) will cover July 26, 2011 0700 to July 29, 2011 0700.

#### 8.0 Liaison/Public Information Officer

#### 8.0 Liaison/Public Information Officer

On July 24, 2011 EPA and DEQ PIOs staffed an information table at the annual Clark Days Celebration at Pompey's Pillar National Monument, 28 miles northwest of Billings on the Yellowstone River. EPA PIO distributed the 7/23 updated fact sheet.

The next media availability session conference call will be on July 27.

Please visit <a href="http://www.epa.gov/yellowstoneriverspill">http://www.epa.gov/yellowstoneriverspill</a> for the latest information, data, and maps.

The Montana DEQ encourages people to call the Governor's information line at 406-657-0231 with questions or stop into the Governor's Billings office at 424 Morey Street or visit <a href="www.yellowstoneriveroilspill.mt.gov">www.yellowstoneriveroilspill.mt.gov</a>.

#### 9.0 Finance Section

The current FPN ceiling is \$2 Million. Approximately 91.67% of the ceiling (\$2,000,000) has been expended or obligated through July 22, 2011. The latest estimated burn rate is \$35,875 per day. These cost summaries reflect only EPA-funded expenditures for the incident.

## FPN E11809 - Silvertip Pipeline Oil Spill As of: 07/24/2011

START Contractor (Ceiling)	Est.Exp.	Est Burn Rate (Latest Daily)
START CONTRACTOR (CCIMING)	LSt.LAp.	(Latest Daily)
R8, R6, R10 START - \$620,000* Sampl'g,Comm, Resp.Support	\$620,000	\$5,967
Response Contractor Sub-Totals	\$620,000	\$5,967
EPA Funded Costs:		
Total EPA Personnel Costs	\$465,500	\$19,366
Pollution Removal Funding Agreements:		
Total Other Agencies (Total \$495,000)**	\$495,000	
Sub-Totals	\$1,580,500	\$30,927
Indirect Cost (16.00%)	\$252,880	\$4,948
Total Est. Oil Spill Cost	\$1,833,380	\$35,875
	\$2,000,000	_

Oil Spill Ceiling authorized by USCG	
Oil Spill Ceiling Available Balance	\$166,620
Est. Percentage Spent	91.67%

#### 10.0 Personnel On Site

Agency/Entity	Numbers Reported 7/25/11*
EPA	19
START	3
NOAA	1
USFWS	4
US DOI	1
USCG	6
BLM	2
Total	36

<sup>\*</sup>based on badge scanning on site

#### 11.0 Additional Information

For additional information, please refer to: http://www.epa.gov/yellowstoneriverspill/

#### 12.0 Reporting Schedule

SITREPs are issued on the first day of the Operational Period and will continue until the UC establishes a different reporting schedule. SitReps are posted to:

R08\_Documentation\_Unit\_Leader@epa.gov

<sup>\*</sup>Pending analytical costs not included.

<sup>\*\*</sup>Pending PFRAs = + \$355,000